

IN THE CLAIMS

Claims 1, 4-6, 8-11 and 16-17 are pending in this application. Please cancel claims 2, 3 and 7 without prejudice or disclaimer, amend claims 1, 4, 8 and 16, and add new claim 17, all as follows:

1. (Currently Amended) A ~~server device~~ communication system, comprising:
 - a processor for issuing and guaranteeing a public key certification;
 - a memory for holding prefix allocation allow/prohibit information of a terminal device, the prefix allocation allow/prohibit information indicating whether allocation of a prefix is allowed or prohibited; and
 - a communications interface for receiving a public key issue certification request from said terminal device and rewriting said prefix allocation allow/prohibit information,
 - said processor being structured to run a routine in which the public key certification issue request is received from said terminal device, wherein
 - a public key certification of said terminal device is issued by the server device[[:]],
 - said prefix allocation allow/prohibit information is rewritten by the server device, and said certification is sent to said terminal device from the server device,
 - the communications interface communicates with a terminal control device for managing the terminal device and for managing location information of the terminal device,
 - said processor is structured to run a routine in which an inquiry on whether prefix allocation is allowed or prohibited is received from said terminal control device, said prefix allocation allow/prohibit information being searched by the server, and the information acquired being sent to said terminal control device from the server device, and
 - the terminal control device has a DHCP-PD function and allocates prefix information using the DHCP-PD function.
- 2-3. (Canceled).
4. (Currently Amended) A terminal control device comprising:

a connection for communication with a server device containing a function to issue and guarantee public key certification, and prefix allocation allow/prohibit information which indicates whether allocation of a prefix is allowed or prohibited;

a transceiver for acquiring public key certification from said server device; and a routine to maintain security by utilizing IPsec technology, and a storage to store a terminal device location information,

wherein information confirming the identity of said terminal is received from said terminal device, and a terminal device public key certification is acquired,

wherein information allowing prefix allocation for said terminal device is loaded from said server device, and if said server device approves allocation of a prefix to said terminal device, then the prefix information is reported to said terminal device,

the terminal control device has a DHCP-PD function and allocates prefix information using the DHCP-PD function, and

information confirming the identity of said terminal has a home address creating in the terminal from the prefix information and the terminal interface identifier.

5. (Previously Presented) A terminal control device according to claim 4, further comprising: an information processing device having a prefix allocation function,

wherein information confirming the identity of said terminal is received from said terminal device,

an inquiry for prefix information is made to said information processor device, and

a reply to the inquiry that indicates that said prefix was allocated is made from said information processor device,

then a reply to the information confirming said identity of the terminal is sent to said terminal device from the transceiver.

6. (Original) A terminal control device according to claim 4,

wherein a location registration request or a binding update request is received from said terminal device, and security information of said terminal device is loaded,

and if said request matches said security information, then location registration or binding update of said terminal device is performed in the terminal control device.

7. (Canceled).
8. (Currently Amended) A terminal authentication method for a communication system containing an information processor device with a prefix allocation function, and a server device containing a processor and a memory to guarantee and issue public key certification, and a visited network and a terminal device capable of connecting to said visited network, and a home network which is associated with the terminal device, and which is mutually connected with said visited network, and a terminal control device connected to said home network via said visited network, wherein
 - said server device issues a public key certification to said terminal device and rewrites prefix allocation information for said terminal device;
 - said information processor device receives a prefix allocation request from said terminal device, and makes an inquiry for prefix allocation allow/prohibit information to said server device, and allocates prefix information to said terminal device when allocation of the prefix is approved, the prefix allocation allow/prohibit information indicating whether allocation of a prefix is allowed or prohibited;
 - said terminal control device receives information confirming the identity of the terminal device from said terminal device, and sends prefix information of said terminal device to said information processor device; [[and]]
 - said information processor device establishes a security association between the terminal device to which said prefix information is issued and said terminal control device;
 - the terminal control device has DHCP-PD function and allocates prefix information using DHCP-PD function; and
 - the terminal creates a home address from the prefix information and the terminal interface identifier.
9. (Previously Presented) A terminal authentication method according to claim 8, wherein a communication device mutually connected to the home network and the visited network sends a prefix allocation request to said information processor device.

10. (Original) A terminal authentication method according to claim 9, wherein said terminal control device receives a location registration request from said terminal device, loads said security association, and approves location registration of said terminal device when said location registration request fulfills said security association.
11. (Previously Presented) A terminal authentication method according to claim 8, wherein
- said terminal control device comprises a communication interface for communicating with said server device, and a storage device for storing public key certification information for a terminal device; and
 - said information processor device sends prefix information to a terminal device approved by said server device.
- 12-15. (Canceled)
16. (Currently Amended) A combination method for authentication and location registration of a terminal located in a visited network comprising:
- powering on a terminal;
 - sending a router advertisement to the terminal from a visited network router;
 - creating a care of address (CoA) in the terminal;
 - sending a device authentication request to the visited network router;
 - sending a public key certification issue request with a public key and a terminal ID to a calling authority server over an IP protocol network;
 - issuing a public key certification issue response from the calling authority server (CA) compatible with IPv6 protocol;
 - establishing a IPsec security association (SA), and digital signature via IKE (internet key exchange) and a secure communication channel using phase I and II IPsec ISAKMP protocols between the terminal in the visited network and a home agent server which is linked to the calling authority server (CA) and which located in a home area;

making a location binding update in the terminal using the IPsec security association (SA);

sending a request to check the public key certification to the calling authority server (CA) from the home agent server;

holding prefix allocation allow/prohibit information of a terminal device, the prefix allocation allow/prohibit information indicating whether allocation of a prefix is allowed or prohibited;

responding from the calling authority server whether prefix allocation is allowed with a prefix and creating a home address for the terminal;

discovering and obtaining a home address of the home agent server by the terminal;

making a location binding update by the terminal using a binding cache from the home agent server;

thereby providing an authentication method for verifying a terminal authenticity by linking a digital signature method with a location binding update method, wherein

the terminal control device has a DHCP-PD function and allocates prefix information using the DHCP-PD function, and

the terminal creates a home address from the prefix information and the terminal interface identifier.

17. (New) A communication system according to claim 1, wherein said terminal creates a home address from said prefix information and a terminal interface identifier.